

*Presented By*  
**City of Torrance**



# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: CA1910213

## Continuing Our Commitment

The City of Torrance is pleased to present our annual water quality report. This edition covers all testing completed from January through December 2016. We are pleased to tell you that our compliance with all State and Federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best-quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Included is information about where the water comes from, what is in it, and how it compares with the regulatory standards set by the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board Division of Drinking Water.

This report will better inform you about your drinking water and the challenges in delivering a high-quality supply of drinking water to your home.

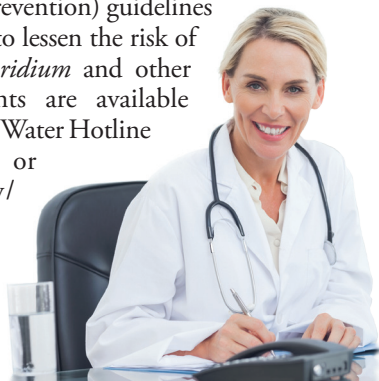
For more information about this report, or for any questions relating to your drinking water, please call Andy Darlak, Water Operations Supervisor, at (310) 781-6900.

## Community Participation

The Torrance Water Commission meets the fourth Wednesday of each month beginning at 7:00 p.m. at the West Annex of City Hall, 3031 Torrance Boulevard, Torrance. You are invited to participate in our public forum and voice your concerns about your drinking water.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



## Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

**Inorganic Contaminants**, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

**Radioactive Contaminants**, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



## Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/lead](http://www.epa.gov/lead).

## Where Does My Water Come From?

The City of Torrance Municipal Water Utility serves approximately 115,000 residents. In 2016, the Municipal Water Utility distributed approximately 17,443 acre-feet of drinking water to its customers, or approximately 5.7 billion gallons. One acre-foot of water is equivalent to 325,900 gallons or an acre of land covered with one foot of water. Torrance purchased 94% of the total potable water supply from the Metropolitan Water District of Southern California (MWD), a regional wholesaler of imported surface water. This water originates from two sources: (1) the Colorado River, via the 242-mile Colorado River Aqueduct, and (2) Northern California, via the 441-mile California Water Aqueduct.

The Metropolitan Water District performs advanced, multi-stage treatment of imported water in five regional treatment plants. The remaining 6% of the municipal potable water supply comes from one operating well pumping from the West Coast Ground Water Basin and from a ground water desalination project.

## Source Water Assessment

An assessment of the drinking water source for the city was completed in May 2015. This study was done in compliance with the State Water Resources Control Board Division of Drinking Water Assessment Program, the goal of which is to determine the water system's vulnerability to possible sources of contamination. The assessment determined that our ground water is most vulnerable to historic gas stations and underground storage tanks. For a copy of the complete assessment, contact the City of Torrance Public Works Department at (310) 781-6900 or visit the following link: [www.torranceca.gov/PDF/SourceWaterAssessment2017.pdf](http://www.torranceca.gov/PDF/SourceWaterAssessment2017.pdf).



## Benefits of Fluoridation

Our water system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6-1.2 ppm with an optimum dose of 0.7 ppm. Our monitoring showed that the fluoride levels in the treated water ranged from 0.68 to 0.96 ppm with an average of 0.82 ppm. Information about fluoridation, oral health, and current issues is available from [http://www.swrcb.ca.gov/drinking\\_water/certlic/drinkingwater/Fluoridation.shtml](http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml).

## Water Conservation Tips

Although California received exceptional precipitation in late 2016 and early 2017, ending a five-year drought, Californians must remain committed to water conservation as a way of life. Thanks to the efforts of our customers, the municipal water utility met its State-mandated water use reduction target of 20 percent. With your continued commitment, conservation savings will continue to grow. Here's how you can reduce your water use:

- Take 5-minute showers: Saves up to 8 gal/shower
- Water your plants before 8 a.m. or after 6 p.m.: Saves up to 25 gal/each time
- Install a smart sprinkler controller: Saves up to 40 gal/day
- Wash only full loads of dishes and clothes: Saves up to 50 gal/load
- Use a broom rather than hose to clean outdoor areas: Saves up to 150 gal/each time
- Check sprinkler system for leaks: Saves up to 500 gal/each time
- Water your lawn 1 to 2 times a week: Saves up to 840 gal/week



For additional information and conservation rebates, go to [Bewaterwise.com](http://Bewaterwise.com) and [torranceca.gov/publicworks](http://torranceca.gov/publicworks).

## Sampling Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

A constituent is any naturally occurring or man-made substance found in drinking water. The U.S. EPA and the California EPA establish the list of constituents that require testing and the frequency of each test. All sample results are from calendar year 2016 or from the most recent sampling, because the State requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included.

| REGULATED SUBSTANCES                                   |  |                           |                               |                   |                    |                   |                                      |                   |           |  |
|--|--|---------------------------|-------------------------------|-------------------|--------------------|-------------------|--------------------------------------|-------------------|-----------|--|
|  |  |                           | City of Torrance Ground Water |                   | MWD Surface Water  |                   | MONITORED IN THE DISTRIBUTION SYSTEM |                   |           |  |
| SUBSTANCE<br>(UNIT OF MEASURE)                         | MCL<br>[MRDL]  | PHG<br>(MCLG)<br>[MRDLG]  | AMOUNT<br>DETECTED            | RANGE<br>LOW-HIGH | AMOUNT<br>DETECTED | RANGE<br>LOW-HIGH | AMOUNT<br>DETECTED                   | RANGE<br>LOW-HIGH | VIOLATION | TYPICAL SOURCE   |
| Aluminum (ppm)   | 1  | 0.6                       | ND                            | NA                | 0.13               | ND–0.22           | NA                                   | NA                | No        | Erosion of natural deposits; residue from some surface water treatment processes   |
| Arsenic (ppb)  | 10   | 0.004                     | 0.5                           | ND–2              | 1.6                | ND–3.1            | NA                                   | NA                | No        | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes                               |
| Barium (ppm)   | 1  | 2                         | ND                            | NA                | 0.07               | ND–0.14           | NA                                   | NA                | No        | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits                                 |
| Chlorine (ppm)   | [4.0 (as Cl <sub>2</sub> )]  | [4 (as Cl <sub>2</sub> )] | NA                            | NA                | NA                 | NA                | 1.5                                  | 0.2–2.20          | No        | Drinking water disinfectant added for treatment  |
| Fecal coliform and <i>E. coli</i> (# positive samples) | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive | (0)                       | NA                            | NA                | NA                 | NA                | 0                                    | NA                | No        | Human and animal fecal waste   |
| Fluoride (ppm)   | 2.0  | 1                         | 0.24                          | 0.22–0.25         | 0.7                | 0.6–1.0           | 0.82                                 | 0.64–0.96         | No        | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Gross Alpha Particle Activity <sup>1</sup> (pCi/L)     | 15   | (0)                       | ND                            | NA                | 1.5                | ND–5.0            | NA                                   | NA                | No        | Erosion of natural deposits  |
| Gross Beta Particle Activity (pCi/L)                   | 50   | (0)                       | NA                            | NA                | 2.5                | ND–6.0            | NA                                   | NA                | No        | Decay of natural and man-made deposits   |
| Haloacetic Acids (ppb)                                 | 60   | NA                        | NA                            | NA                | NA                 | NA                | 11.3                                 | 2.4–20.1          | No        | By-product of drinking water disinfection  |
| Methyl tert-Butyl Ether [MTBE] (ppb)                   | 13   | 13                        | 3.9                           | ND–12.0           | ND                 | NA                | NA                                   | NA                | No        | Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories                         |
| Nitrate [as nitrate] (ppm)                             | 45   | 45                        | ND                            | NA                | 0.40               | ND–0.9            | NA                                   | NA                | No        | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits              |
| Radium 226 (pCi/L)                                     | 5  | 0.05                      | 0.09                          | 0.09–0.09         | ND                 | NA                | NA                                   | NA                | No        | Erosion of natural deposits  |
| Radium 228 (pCi/L)                                     | 5  | 0.019                     | 0.1                           | 0.1–0.1           | ND                 | NA                | NA                                   | NA                | No        | Erosion of natural deposits  |

| Regulated Substances   |  |               |                          |                                   |                                  |                    |   |                                      |                   |           |  |
|--|--|---------------|--------------------------|-----------------------------------|----------------------------------|--------------------|---|--------------------------------------|-------------------|-----------|--|
|  |  |               |                          | City of Torrance Ground Water     |                                  | MWD Surface Water  |   | Monitored in the Distribution System |                   |           |  |
| Substance<br>(Unit of Measure)   |  | MCL<br>[MRDL] | PHG<br>(MCLG)<br>[MRDLG] | Amount<br>Detected                | Range<br>Low-High                | Amount<br>Detected | Range<br>Low-High   | Amount<br>Detected                   | Range<br>Low-High | Violation | Typical Source   |
| TTHMs [Total Trihalomethanes] (ppb)  |  | 80            | NA                       | NA                                | NA                               | NA                 | NA  | 70.6                                 | 22.5–65.1         | No        | By-product of drinking water disinfection  |
| Total Coliform Bacteria (% positive samples)   |  | TT            | NA                       | 0                                 | NA                               | NA                 | NA  | 0.2                                  | NA                | No        | Naturally present in the environment   |
| Turbidity (NTU)  |  | TT            | NA                       | NA                                | NA                               | NA                 | NA  | 1.4                                  | 0.05–1.4          | No        | Soil runoff  |
| Uranium (pCi/L)  |  | 20            | 0.43                     | ND                                | NA                               | 2.5                | 2.0–3.0   | NA                                   | NA                | No        | Erosion of natural deposits  |
| Tap water samples were collected for lead and copper analyses from sample sites throughout the community |  |               |                          |                                   |                                  |                    |   |                                      |                   |           |  |
| Substance<br>(Unit of Measure)   |  | AL            | PHG<br>(MCLG)            | Amount<br>Detected<br>(90th%tile) | Sites Above<br>AL/Total<br>Sites | Violation          | Typical Source  |                                      |                   |           |  |
| Copper (ppm)   |  | 1.3           | 0.3                      | 0.15                              | 0/200                            | No                 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives               |                                      |                   |           |  |
| Lead (ppb)   |  | 15            | 0.2                      | ND                                | 0/200                            | No                 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |                                      |                   |           |  |
| Secondary Substances   |  |               |                          |                                   |                                  |                    |   |                                      |                   |           |  |
|  |  |               |                          | City of Torrance Ground Water     |                                  | MWD Surface Water  |   | Monitored in the Distribution System |                   |           |  |
| Substance<br>(Unit of Measure)   |  | SMCL          | PHG<br>(MCLG)            | Amount<br>Detected                | Range<br>Low-High                | Amount<br>Detected | Range<br>Low-High   | Amount<br>Detected                   | Range<br>Low-High | Violation | Typical Source   |
| Aluminum (ppb)   |  | 200           | NS                       | ND                                | NA                               | 130                | ND–200  | NA                                   | NA                | No        | Erosion of natural deposits; residual from some surface water treatment processes  |
| Chloride (ppm)   |  | 500           | NS                       | 178.3                             | 170–200                          | 98                 | 89–103  | NA                                   | NA                | No        | Runoff/leaching from natural deposits; seawater influence  |
| Color (Units)  |  | 15            | NS                       | 4                                 | 3.0–5.0                          | 1.5                | 1–2   | <5                                   | <5–<5             | No        | Naturally occurring organic materials  |
| Corrosivity (Units)  |  | Non-corrosive | NS                       | 12.8                              | 12.7–12.8                        | NA                 | NA  | NA                                   | NA                | No        | Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors |
| Manganese (ppb)  |  | 50            | NS                       | 32.2                              | 20–56                            | ND                 | NA  | NA                                   | NA                | No        | Leaching from natural deposits   |
| Methyl tert-Butyl Ether [MTBE] (ppb)   |  | 5             | NS                       | 3.9                               | ND–12.0                          | NA                 | NA  | NA                                   | NA                | No        | Leaking underground storage tanks; discharge from petroleum and chemical factories   |
| Odor–Threshold (Units)   |  | 3             | NS                       | 1                                 | 1–1                              | 2.5                | 2.0–3.0   | ND                                   | NA                | No        | Naturally occurring organic materials  |
| Specific Conductance (µS/cm)   |  | 1,600         | NS                       | 529.6                             | 65–1,503                         | 861                | 652–1,050   | NA                                   | NA                | No        | Substances that form ions when in water; seawater influence  |
| Sulfate (ppm)  |  | 500           | NS                       | 268                               | 86–320.0                         | 176.5              | 86–259  | NA                                   | NA                | No        | Runoff/leaching from natural deposits; industrial wastes   |
| Total Dissolved Solids (ppm)   |  | 1,000         | NS                       | 490.7                             | 340–640                          | 527.5              | 377–659   | NA                                   | NA                | No        | Runoff/leaching from natural deposits  |
| Turbidity (Units)  |  | 5             | NS                       | 0.25                              | ND–0.5                           | ND                 | NA  | NA                                   | NA                | No        | Soil runoff  |

### UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3) - CITY OF TORRANCE GROUND WATER<sup>2</sup>

| SUBSTANCE<br>(UNIT OF MEASURE)                 | YEAR<br>SAMPLED | AMOUNT<br>DETECTED | RANGE<br>LOW-HIGH |
|--|-----------------|--------------------|-------------------|
| <b>Chlorate</b> (ppb)                          | 2013–2015       | 175.88             | ND–920            |
| <b>Chromium (Total)</b> (ppb)                  | 2013–2015       | 0.01               | ND–0.21           |
| <b>Chromium VI [Hexavalent Chromium]</b> (ppb) | 2013–2015       | 0.02               | ND–0.06           |
| <b>Molybdenum</b> (ppb)                        | 2013–2015       | 0.83               | ND–4.7            |
| <b>Strontium</b> (ppb)                         | 2013–2015       | 348.6              | ND–1,200          |
| <b>Vanadium</b> (ppb)                          | 2013–2015       | 0.5                | ND–3.2            |

### ADDITIONAL CHEMICALS OF INTEREST

|                                      | GROUNDWATER |                   | MWD'S SURFACE WATER |                   |
|--------------------------------------|-------------|-------------------|---------------------|-------------------|
| SUBSTANCE<br>(UNIT OF MEASURE)       | AVERAGE     | RANGE<br>LOW-HIGH | AVERAGE             | RANGE<br>LOW-HIGH |
| <b>Alkalinity</b> (mg/l)             | 193.3       | 190–200           | 106                 | 92–124            |
| <b>Boron</b> (µg/l)                  | NA          | NA                | 210                 | 150–270           |
| <b>Calcium</b> (mg/l)                | 101.6       | 82.9–150          | 55.0                | 30–79             |
| <b>Magnesium</b> (mg/l)              | 32          | 27.8–43           | 19                  | 12–27             |
| <b>N-Nitrosodimethylamine</b> (ug/l) | NA          | NA                | 1.4                 | ND–0.005          |
| <b>pH</b> (standard unit)            | 7.8         | 7.6–8.0           | 8.2                 | 8.1–8.3           |
| <b>Potassium</b> (mg/l)              | 8.7         | 8.1–9.2           | 4.1                 | 2.9–5.1           |
| <b>Sodium</b> (mg/l)                 | 175         | 80–270            | 97                  | 84–106            |
| <b>Total Hardness</b> (mg/l)         | 427.5       | 326–720           | 214.5               | 126–306           |
| <b>Total Organic Carbon</b> (mg/l)   | 1.6         | 1.6               | 2.4                 | 1.7–2.8           |

<sup>1</sup> Gross alpha particle activity standard also includes the radium 226 standard.

<sup>2</sup> Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

## Definitions

**AL (Regulatory Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.